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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Shoji ICHINOHE

Group Art Unit: 1615

Serial No.: 10/070,808

Examiner: Lakshmi S Channavajjala

Filed: March 11, 2002

For: COSMETIC MATERIAL

HONORABLE COMMISSIONER OF
PATENTS AND TRADEMARKS
WASHINGTON, D.C. 20231
U.S.A.

DECLARATION UNDER RULE 37 C.F.R. 1.132

Sir:

I, Shoji ICHINOHE, a citizen of Japan, having the post office address of c/o Silicone Electronic Material Research Center, Shin-Etsu Chemical Co., Ltd., 1-10, Oaza, Hitomi, Matsuidacho, Usuigun, Gunma-ken, 379-0224, JAPAN, declare and state:

that I am a professional in the art of the above -identified patent application;

that in March, 1974, I had finished my course in chemistry at Tokyo University of Technology(the postgraduate course in material science);

that in April, 1974, I was employed by Shin-Etsu Chemical Co., Ltd., and assigned to the Silicone Electronic Material Research Center; and since then till now, I have been engaged in research and development relating to silicone polymer;

that, upon having studied the Office Action, I herein submit experimental data obtained by myself to prove that the silicone modified carnauba wax is useless for the present invention and to overcome the examiner's rejection on the present application.

I. Experiments to illustrate that a silicone modified carnauba wax is useless for the present invention.

(1) Preparation of silicone modified carnauba wax:

1,100g of carnauba wax having an acetyl value of 51 (1 molar equivalent in terms of OH) and 1,500g of xylene were weighed out in a flask, and dehydrated at 145°C for 1 hour.

Next, 95g (1 mole) of anhydrous succinic acid and 18.5g (0.1 moles) of tributylamine were introduced at 140°C and reacted for 4 hours to introduce a carboxyl group into the hydroxyl group of the carnauba wax.

Next, 248g (2 moles) of vinylcyclohexene epoxide were introduced at 140°C, and reacted at the same temperature for 3 hours so that the carboxyl group reacted with the epoxygroup. Excess vinylcyclohexene epoxide, tributylamine catalyst and xylene solvent were removed by stripping. Next, 1,500g of xylene was introduced, 4g of a 0.5% toluene solution of platinum chloride together with 660g (0.45 moles) of a hydrogen silicone having the following structure were added, and reacted at 120°C for 5 hours.



It was confirmed that all the SiH had been consumed.

After removing the xylene by stripping, 1,960g of a silicone modified carnauba wax (yield 99%) which was transparent after hot melting, was obtained. When the melting point was measured by DSC, it was found to be 80-87°C.

(2) Properties of mixtures using the obtained silicone modified carnauba wax(sample wax)

The following A-F mixtures were prepared.

Mixture	A	B	C	D	E	F
Sample Wax	30	30	20	20	20	30
KF96(6cs)	60	70	70	80	-	70
Gly-Trioctanoate	10	-	10	-	-	-
Polywax500	10	10	-	-	-	-
D-5	-	-	-	-	80	-

In the table, amount is expressed by parts by weight, and KF96, Polywax and D-5 are as

follows.

KF96 : Trade name, a product of Shin-Etsu Chemical Co., Ltd.

Polywax: Polyethylenewax having molecular weight of 500

D-5 : Decamethylcyclopentasiloxane

After leaving two hours at room temperature from the preparation of mixture, homogeneity of all mixtures were evaluated with the naked eye.

The results are shown in the following table.

Mixture	Homogeneity
A	homogeneous
B	partially insoluble
C	much insoluble
D	much insoluble
E	homogeneous
F	much insoluble

Small crystal had been observed in all mixtures including the cases of A and E, therefore, smooth touch can not be obtained.

It is therefore concluded that the embodiments of the present application are significantly superior in performance to the embodiments of the cited references and they are neither simply modified combination of the references nor modification of each of the references, and it has been proved that the present invention should not be rejected under 35 U.S.C. 103(a)..

The undersigned declarant declares further, that all statements made herein of his own knowledge are true, and that all statements made on information and belief are believed

to be true; and further that these statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: October 31, 2003

Shoji Ichinohe

Shoji ICHINOHE